



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,959	07/02/2003	Leo Chiu	APPT-015.US	6800
65898 7590 10/09/2007 INNOVATION STRATEGIES, INC. P.O. BOX 48577 SPOKANE, WA 99228			EXAMINER LERNER, MARTIN	
			ART UNIT 2626	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/613,959

Applicant(s)

CHIU, LEO

Examiner

Martin Lerner

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 to 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 to 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Muthuswamy et al.* in view of *Seeley et al.* and *Kausik et al.*

(Note: Applicant's prior applications, filed as continuation-in-parts under 35 U.S.C. §120, and as a provisional application under 35 U.S.C. §119(e), were reviewed, but do not provide support for the subject matter of independent claim 1. Applicant's priority date for independent claim 1 is deemed to be the filing date of the current application, 02 July 2003. Subject matter for independent claim 1 is provided by the Summary of the Invention on Pages 7 to 10, Pages 58 to 68, and Figures 23 to 24 of Applicant's Specification.)

Concerning independent claim 1, *Muthuswamy et al.* discloses a system for refreshing static and dynamic data downloaded to a browser from a network site, comprising:

"a static content optimizer connected to the processor for identifying files containing static content, wherein the static content optimizer tags the files containing

static content with a static tag” – in a preferred process for downloading and refreshing network sites from the Internet 16 to a user computer 18, a decision is made as to whether the data representing a web page is static or dynamic data (column 3, lines 1 to 9: Figure 6: Steps 50 and 52); an expiration rule is optionally added to each of the static data layers within a cache of a browser to provide additional flexibility in managing and downloading content of the web page; the expiration rule allows the static layer to have a predetermined duration for refreshing the layer, and the browser will then refresh only unexpired layers; while requesting expired static layers from the website on the web server (column 4, lines 47 to 55); thus, the static content is optimized by only requesting from the web server upon expiration of a predetermined duration; if the data is dynamic data, then the data is preferably marked with pointers as dynamic data, and if the data is not dynamic data, it is then marked with pointers indicating that it is static data (“tag the files containing static content with a static tag”) (column 3, lines 9 to 13: Figure 6: Steps 54 and 56);

“a dynamic content optimizer connected to the processor for identifying files containing dynamic content, [wherein the dynamic content optimizer analyzes previous execution of the voice application to determine whether to cache each file containing dynamic content,] and wherein the dynamic content optimizer tags the files containing dynamic content with an appropriate tag” – in a preferred process for downloading and refreshing network sites from the Internet 16 to a user computer 18, a decision is made as to whether the data representing a web page is static or dynamic data (column 3, lines 1 to 9: Figure 6: Steps 50 and 52); only the dynamic portions of a document will be

Art Unit: 2626

retrieved from the server when refreshing of the downloaded web page is requested (column 4, lines 43 to 45); thus, dynamic content is optimized by retrieving from the server upon a request to refresh, as dynamic data is more rapidly changing; if the data is dynamic data, then the data is preferably marked with pointers as dynamic data, and, if the data is not dynamic data, it is then marked with pointers indicating that it is static data ("tag the files containing dynamic content with an appropriate dynamic flag") (column 3, lines 9 to 13: Figure 6: Steps 54 and 56);

"characterized in that the optimizers prepare the files containing static content and the files containing dynamic content for distribution to selected end-system cache facilities, based on the tags associated with each content, for local retrieval during consumer interaction with the deployed application" – after the data is preferably marked with the relevant pointers, it is stored in a local cache data store of the user computer (column 3, lines 13 to 15: Figure 6: Step 58); however, a comparison of the data in the local cache is made as to whether the stored data is identified as dynamic data, and then the corresponding dynamic data on the website is again retrieved (column 3, lines 49 to 56: Figure 6: Step 66); the process of marking the static and dynamic data can alternately be performed on the web server (column 3, lines 63 to 64); thus, although both static and dynamic data is initially cached locally on the user computer, dynamic data is maintained at the web server when the web page is refreshed; when refreshing of a downloaded web page is requested, only the dynamic content file is downloaded from the web server (column 3, lines 38 to 48; column 4,

lines 35 to 47); a request for refreshing a web page from a user is a "consumer interaction with the deployed application".

Concerning independent claim 1, *Muthuswamy et al.* discloses a processor for downloading static and dynamic content for hyper-text mark-up language web pages, but omits "a processor for processing the voice application according to sequential dialog files of the application". However, *Seeley et al.* teaches a method of using automated speech recognition for web-based voice applications, where an automated data provider provides data such as stock quotes and bank balances to users over phone lines, and the information provided has two parts. The first part of the information is known as static data, and is a standard greeting or prompt, which may be the same for a number of users, and the second part of the information is known as dynamic data, which can be a stock price that is continually changing as prices fluctuate. ¶[0004] The application is an Interactive Voice Response (IVR) for web-based voice service environments. ¶[0013] An IVR involves sequential dialogs of an application with a user, as illustrated by audio data of ¶[0023] - ¶[0030]. Thus, *Seeley et al.* generally provides that it is known to utilize static and dynamic data for voice applications with sequential dialog files. *Muthuswamy et al.* suggests an advantage for a method of refreshing static and dynamic data from a web page to reduce a transmitted file size and bandwidth needed to download web pages. (Column 2, Lines 58 to 67) It would have been obvious to one having ordinary skill in the art to apply the method of refreshing static and dynamic data of *Muthuswamy et al.* to a voice

Art Unit: 2626

application having sequential dialog files of *Seeley et al.* for a purpose of reducing a transmitted file size and bandwidth.

Concerning independent claim 1, moreover, *Muthuswamy et al.* discloses a processor for downloading static and dynamic content for hyper-text mark-up language web pages, but omits “wherein the dynamic content optimizer analyzes previous execution of the voice application to determine whether to cache each file containing dynamic content”. However, *Kausik et al.* teaches that, while dynamic content changes frequently, and cannot readily be cached, improved performance of dynamic content can be obtained by pre-fetching web content. An applet downloads popular web content to the user’s browser, in anticipation of the user’s next request, where the downloaded content may be that which other users most frequently download from the page. (¶[0004] - ¶[0005]) The content can be computed on a user-by-user basis on the basis of the user’s history. (¶[0010] - ¶[0011]) Some or all of a user’s history file, including trigger classes and/or anticipation classes, may be stored in a database, or as a cookie in the user’s browser. (¶[0047] - ¶[0048]) An objective of caching anticipation classes is to improve response time. (¶[0036] - ¶[0037]) It would have been obvious to one having ordinary skill in the art to analyze previous execution of an application to determine whether to cache dynamic content as taught by *Kausik et al.* in a system and method for merging static and dynamic content on web pages of *Muthuswamy et al.* for a purpose of improving response time.

Concerning claims 2 and 3, *Seeley et al.* suggests that processing of static and dynamic audio can be by software instructions or by functionally equivalent circuits, such as an application specific integrated circuit (ASIC). ¶[0020] - ¶[0021]

Concerning claim 4, *Seeley et al.* discloses an Interactive Voice Response (IVR) for web-based voiced applications ¶[0013], involving a series of dialogs ¶[0023] - ¶[0030] (“processing subsequent dialogs of a voice application”).

Concerning claim 5, *Muthuswamy et al.* discloses an architecture including a user computer 18 and a web server 12 (“an application server”)(column 2, lines 13 to 28: Figure 1), and interaction on limited capability devices such as telephone modems and other wireless mobile terminals (column 4, lines 63 to 67); *Seeley et al.* discloses a communications path for a telephone connection or a wireless or cellular connection ¶[0022], which is implicitly known as “a voice portal” for IVR voice applications.

Concerning claim 6, *Seeley et al.* discloses dynamic data, which is “non-recurring” for stock prices ¶[0004]; a voice application includes a “menu dialog”, e.g. “Please enter or say your pin number” ¶[0027], and a “result dialog”, e.g. “Your current balance is <dollars>” ¶[0028].

3. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Muthuswamy et al.* in view of *Seeley et al.* and *Kausik et al.* as applied to claim 1 above, and further in view of *Cheng* ('512).

Muthuswamy et al. discloses that marking the static and dynamic data can be performed on the web server (column 3, lines 63 to 67), which may imply that the static

Art Unit: 2626

and dynamic data can be cached at a web server, but does not expressly disclose caching the data at a telephone server cache and at a Web controller cache. However, *Cheng* ('512) teaches a method of unfolding dynamic web content in a wireless information gateway, where a wireless information gateway 20 has an unfolding engine 40, which in turn has an interpreted page cache 60 for storing static and dynamic content of web pages. (Column 4, Lines 25 to 34; Column 5, Lines 3 to 22; Column 5, Line 65 to Column 6, Line 4: Figures 1 to 3) Thus, an interpreted page cache 60 storing static and dynamic content on a wireless information gateway 20 is equivalent to an "end system is a Web controller cache". Moreover, *Cheng* ('512) discloses a wireless information gateway 20 for wireless devices, such as cell phones (column 1, lines 41 to 50), so that an interpreted page cache 60 in a wireless information gateway 20 supporting a cell phone may be described equivalently as "a telephone server cache". *Cheng* ('512) states an objective is to provide a means for delivering dynamic and interactive content to more limited wireless devices. (Column 2, Lines 8 to 11) It would have been obvious to one having ordinary skill in the art to cache static and dynamic content at a telephone server cache or Web controller cache as taught by *Cheng* ('512) in a method of refreshing static and dynamic content of *Muthuswamy et al.* for a purpose of delivering dynamic content to more limited wireless devices.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Muthuswamy et al.* in view of *Seeley et al.* and *Kausik et al.* as applied to claim 1 above, and further in view of *Bokhari et al.*

Muthuswamy et al. omits HTTP 1.1 as a standard for resource tagging.

However, *Bokhari et al.* teaches HTTP/1.1 ¶[0069], and suggests dynamic content for the Internet ¶[0081]. “Notice” is taken that HTTP/1.1 is the current standard used for all data transfers on the Internet by hypertext transfer protocol (HTTP). Thus, it would have been obvious to one having ordinary skill in the art to mark static and dynamic data with pointers as taught by *Muthuswamy et al.* using HTTP 1.1 resource tagging because HTTP/1.1 is the current standard for all data transfers by HTTP.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Muthuswamy et al.* in view of *Seeley et al.* and *Kausik et al.* as applied to claim 1 above, and further in view of *Nanja et al.*

Muthuswamy et al. omits an optimization using results from statistical analysis to determine which files to tag, and continued dynamic tagging relying on changing statistical probability results. However, *Nanja et al.* teaches it is known in persistent cache methods to use a data eviction policy to remove cached code that is not being used with a sufficient frequency to justify consumption of relatively scarce memory resources. Specifically, one eviction technique known as the least recently used algorithm, tends to retain (i.e. to not evict) cache data that has a relatively high probability of being used in the near future. ¶[0018] It would have been obvious to one having ordinary skill in the art to utilize an eviction policy based upon statistical analysis or changing statistical probability results as taught by *Nanja et al.* in a method of

refreshing static and dynamic content of *Muthuswamy et al.* for a purpose of conserving relatively scarce memory resources for cached data that is not being frequently used.

Response to Arguments

6. Applicant's arguments filed 20 August 2007 have been considered but are moot in view of the new grounds of rejection, necessitated by amendment.

Conclusion

7. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (571) 272-

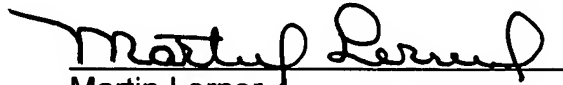
Art Unit: 2626

7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML
3/22/07


Martin Lerner
Examiner
Group Art Unit 2626